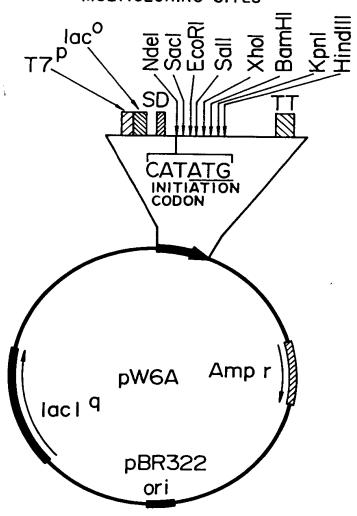
F | G. | DETAILED DIAGRAM OF EXPRESSION VECTOR PW6A

MULTICLONING SITES



T7^p

: T7 PROMOTER

lac ⁰

: IC OPERATER

SD

: SHINE-DALGARNO SEQUENCE

TT

: T7 TRANSCRIPTIONAL TERMINATOR

Amp r

: B LACTAMASE

lac I q

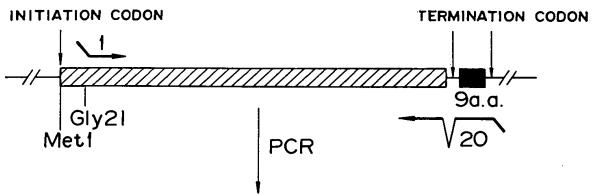
: lac repressor

pBR322 ori

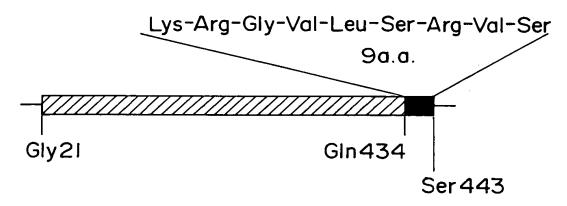
: REPLICATION ORIGIN

F I G. 2 PREPARATION OF GENE ENCODING 47K ANTIGEN

GENE ENCODING 47K ANTIGEN ON GENOMIC DNA



GENE ENCODING 47K ANTIGEN WITH C TERMINAL EXTRA SEQUENCE (N TERMINAL SIGNAL SEQUENCE IS DELETED)



PRIMER

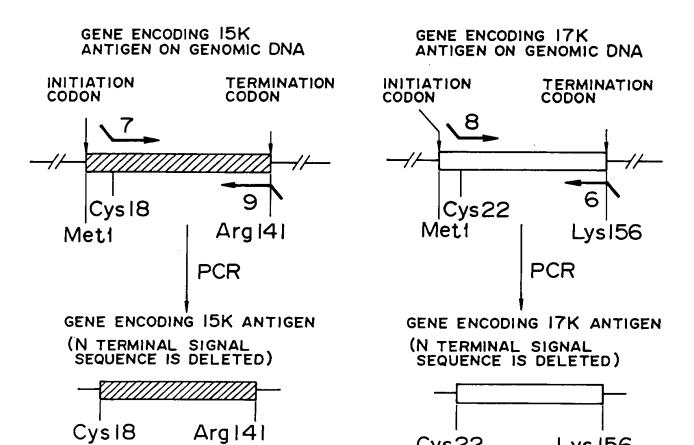
USSN

Cys22

Lys 156

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F I G. 3 PREPARATION OF GENE ENCODING 15K ANTIGEN AND 17K ANTIGEN



PRIMER

F I G. 4 DETAILED DIAGRAM OF EXPRESSION VECTOR FOR TWO-ANTIGEN FUSED ANTIGEN INITIATION TERMINATION pW6A-15-17 CODON PO SD l7ĸ BamHi Ndel pW6A-15-47 INITIATION CODON TERMINATION CODON Sall Ndel BamHl pW6A-47-17 INITIATION COPON TERMINATION CODON PO SD 7ĸ Sall Ndel BamHl pW6A-47-15 TERMINATION CODON INITIATION CODON Sall Ndel BamHl INITIATION TERMINATION CODON pW6A-17-15 Ndel Xhol Sall **BamHI** pW6A-17-47 INITIATION CODON TERMINATION CODON PO SD 47ĸ 17<u>k</u> Ndel _{Xhol} Sall BamHI

F I G. 5

DETAILED DIAGRAM OF EXPRESSION VECTOR FOR THREE-ANTIGEN FUSED ANTIGEN

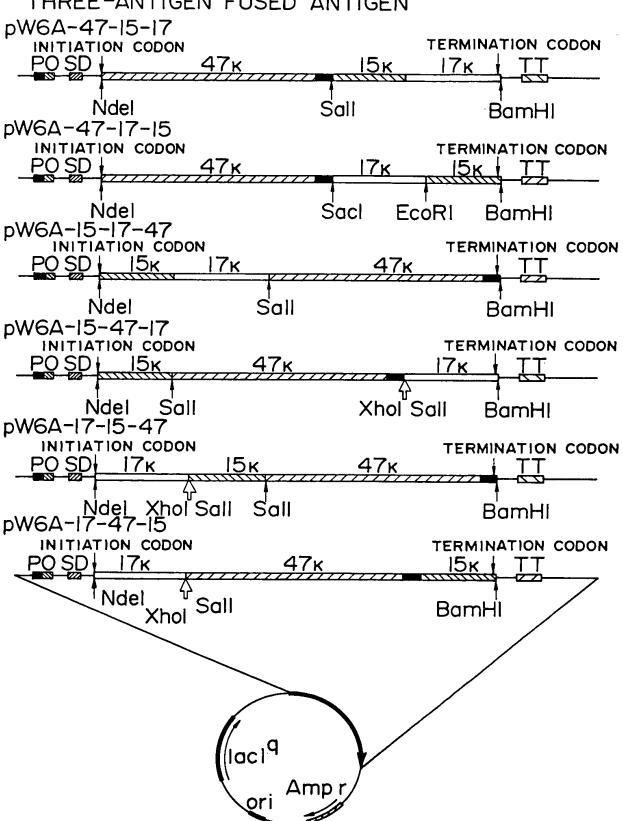
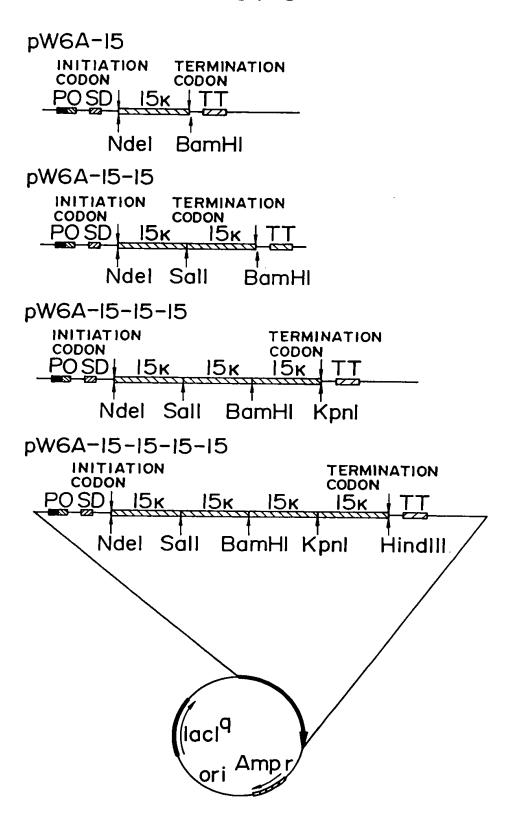
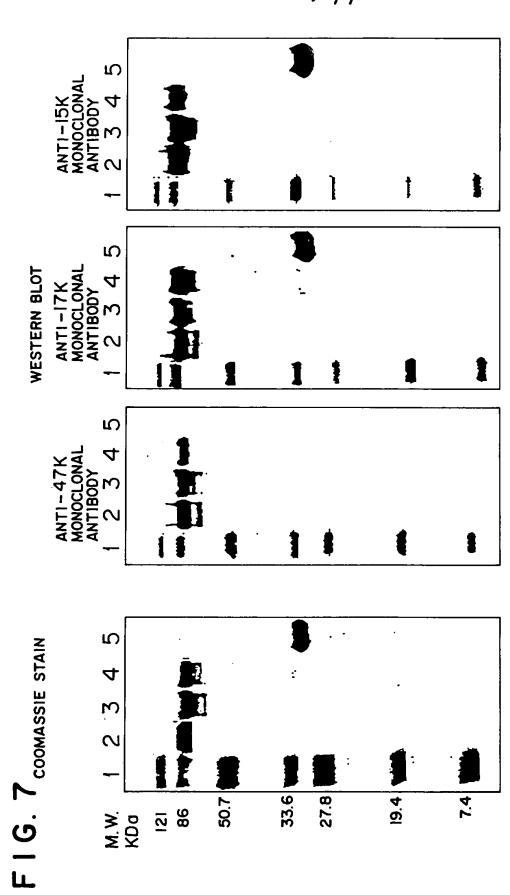


FIG. 6



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LANE 1 : MOLECULAR WEIGHT MARKER

2: 47-17-15

4: 15-17-47 3:47-15-17

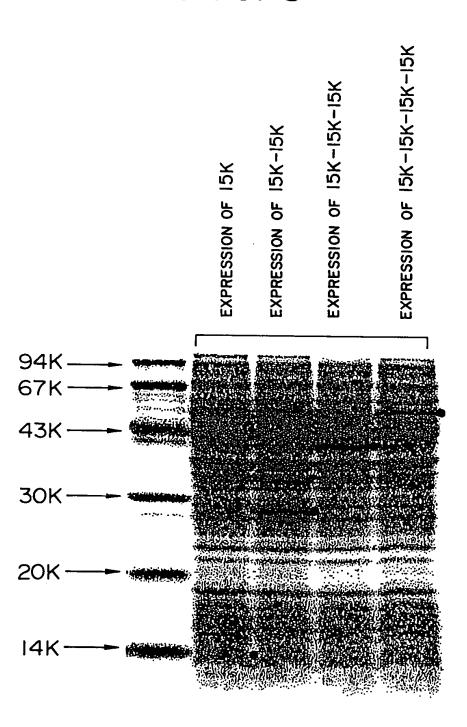
5: 15-17





8///

FIG. 8



F I G. 9

χĊ	15K-15K	EXPRESSION OF 15K-15K-15K	EXPRESSION OF 15K-15K-15K-
P	0	0F	OF
EXPRESSION OF 13K	EXPRESSION OF 15K-15K	EXPRESSION	EXPRESSION

123K — -

85K ——

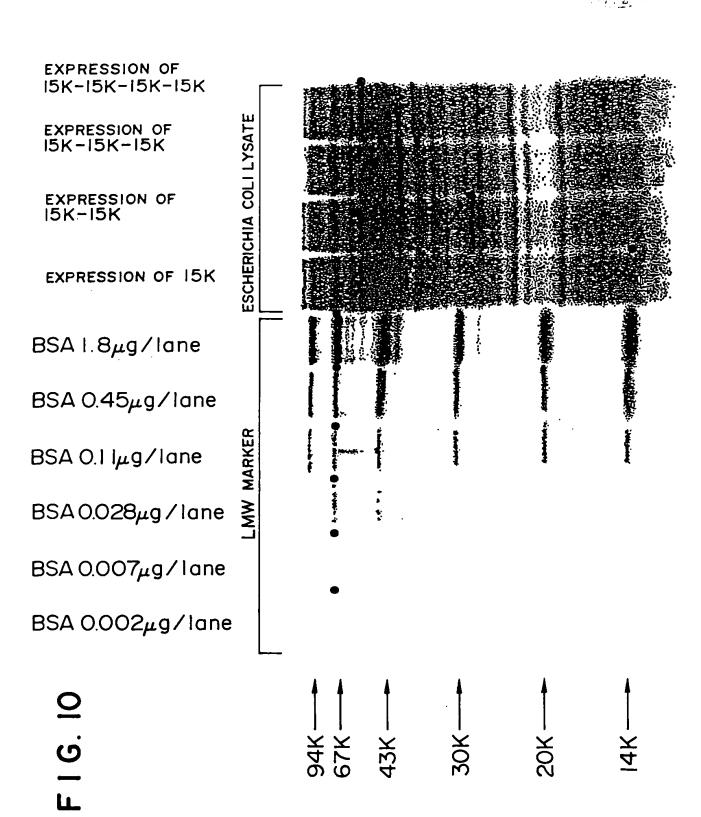
50K ──

33K ——

29K ---

19K ---

8K —-



F | G. | |

